

# FORESTRY SCIENCE IN THE SERVICE OF MAN



NUMBER 14

## *Homeowners can do something about the 'GYPSY MOTH'*

Homeowners can do something about the gypsy moth. While researchers continue to work out a total solution to the gypsy moth problem, homeowners will find that there are several methods for protecting families and trees from the nuisances that gypsy moth caterpillars cause during the early summer months.

Between October and late April, destroying egg masses is a convenient control method. During this period, the buff colored, inch-and-one-half long, fuzzy egg clusters are more in view, less hidden by the tree's foliage. These clusters, each containing several hundred eggs with the possibility of releasing several hundred caterpillars in time, should be easy to spot on the undersides of tree branches, along trunks, or in protected areas. They will most likely be found on or near tree species that the caterpillars are known to attack most often.

The gypsy moth's favorite trees -- those that are most generally defoliated by the insect -- include apple, speckled alder, basswood, gray and river birch, hawthorne, oaks, poplars, and willows. Less desired, but still attacked, are black,



Gypsy Moth caterpillar has pairs of red and blue dots on its back.

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Female moths are white with black wing markings. This one is laying velvety, buff-colored egg mass on tree bark.

yellow and paper birch, cherry, chestnut, elm, black gum, hickory, hornbeam, larch, maples, and sassafras. Older gypsy moth caterpillars devour the foliage of several tree species that as younger caterpillars they would pass up. Hemlock, southern white cedar, and the pines and spruces native to the East are in this category.

The gypsy moth tends to avoid ash, balsam, butternut, black walnut, catalpa, red cedar, flowering dogwood, American holly, locust, sycamore, and yellow or tulip poplar.

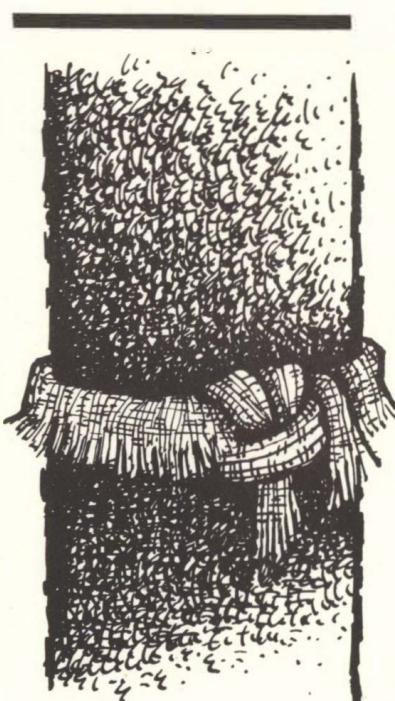
Once located, egg masses can be painted with creosote and left on the tree, or scraped off with a knife or a flat wooden stick. If the creosote method is used, caution is advisable, since creosote can produce eye and skin irritations. If the scraping method is used, the eggs should be collected and then either dropped into a can of kerosene or burned until they are destroyed.

Merely scraping the eggs off will do no good, since eggs can still hatch on the ground.

Since individuals are often allergic to the hairy caterpillars, or to the hair covering their eggs, it is wise to avoid contact when removing them.

Protection against existing gypsy moth caterpillars during the period when defoliation is occurring -- from mid-May through mid-June -- is more time-consuming and involved. One method takes into consideration the daily habits of this pest. Since older caterpillars routinely seek protected spots to hide in during daytime hours, it is possible to entice the gypsy moth into the seeming comforts of a 5-inch wide strip of burlap, tied around a tree trunk about 5 feet from the ground. The burlap strip should be folded over to form a flap, that can be lifted to permit caterpillars to be removed and destroyed each day.

This method should be used even after all visible egg masses have been destroyed in an area, in case some did escape detection. This method will also serve as protection against those tiny, newly-hatched caterpillars that may be blown in by wind currents.



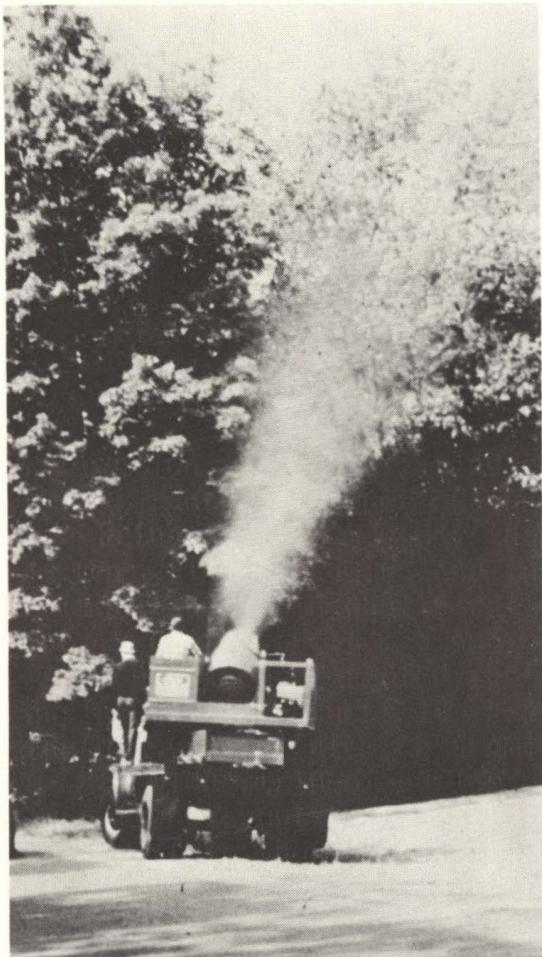
Tie a 5-inch wide strip of burlap around the tree and fold-over to trap caterpillars.

A sticky substance called Tangle-foot can also be used to protect trees. Applied in a strip around the trunk, Tangle-foot works somewhat like flypaper, catching and holding caterpillars as they migrate up and down the tree.

Both methods require constant attention when keeping large outbreaks of caterpillars under control. In using these methods in a heavy infestation, a homeowner might have to choose between protecting tree species that tend to be most severely defoliated, and protecting his most valuable trees. If many trees need protection, the use of recommended insecticides might offer the best solution.

Insecticides provide a high degree of foliage protection. Hand-operated sprayers may be used to apply insecticides to shrubs and small trees. For tall trees, a custom spray applicator with proper high-pressure equipment should be hired.

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To spray tall trees, use a high-pressure, commercial mist blower.

The insecticide Sevin can be applied either from the ground or the air. The insecticide Gardona and the microbial agent Bacillus thuringiensis (BT), can be applied from the ground to effectively control the caterpillars. As in the case of all such substances, directions must be followed carefully both to insure effectiveness in protecting trees from defoliation and to prevent injury and undesired effects on other organisms.

Homeowners planning to spray their own trees should check with a county agent or state agricultural experiment station for advice on the control agent to use and on the best time to spray.

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Caterpillars are full-grown by late June. They then stop feeding and seek a protected place to pass into the pupal stage. They emerge as adult moths in August. While the insects feed only as caterpillars, collection of the brown pupal cases during the summer can also make a beneficial impact on the population level the following year.



Male and female  
Gypsy Moths in  
the pupae stage.



#### Caution about Pesticides

This publication reports research involving pesticides. It does not contain recommendations for their use, nor does it imply that the uses discussed here have been registered. All uses of pesticides must be registered by appropriate State and/or Federal agencies before they can be recommended.

**CAUTION:** Pesticides can be injurious to humans, domestic animals, desirable plants, and fish or other wildlife—if they are not handled or applied properly. Use all pesticides selectively and carefully. Follow recommended practices for the disposal of surplus pesticides and pesticide containers.